

The claims remaining in the application are 1-23.

REMARKS

The Applicant would like to thank the Examiner for the courteous and very quick final Office Action. The Applicant further appreciates the entrance of the formal drawings and the Information Disclosure Statement.

The Applicant acknowledges the correction by the Examiner with respect to the duplicate claims numbered 20, and the renumbering of claims presently as 21, 22, and 23. The Applicant regrets any confusion that may have been caused by this inadvertent error.

Claim Rejections Under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 1-23 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant regards as the invention.

The Examiner finds that claims 5 and 6 lack proper antecedent basis for salts. The scope of the claims 1-8 are indefinite because claim 1 provides for the addition of an acid and claims 5 and 6 define acid to include salts. It is unclear if claims 1-4 and 7-8 also include the addition of salts. In claim 1, the claim should provide *ipso verba* basis for "the gel".

Claim 9 is found by the Examiner to employ idiomatic English by the phrase, "an effective amount of at least one aminocarboxylic acid to directly on the polymer ...".

In claims 14 and 20, the Examiner contends that it is unclear what is the intended scope of the claims. Said claims set forth "at least one polymer forming a gel" and within the same claim "at least one aminocarboxylic acid in an effective amount to directly break down the gel". It is unclear what forms the aqueous fluid takes since the claims recite both the formation of a gel and an effective amount of an agent to break down said gel.

Applicants do not define the term cross-linking and/or crosslinker in the claims. The specification indicates borate cross-linked guar gum. The scope of cross-linker or

cross-linking ion is indefinite because it is unclear whether said limitation excludes organic cross-linkers or cross-linkers other than borates.

The Applicant appreciates the Examiner pointing out these concerns.

The Examiner's attention is respectfully directed to the amendments to claims 1, 14, and 20 where the phrase "or a salt thereof" has been added after the term "at least one aminocarboxylic acid". It is respectfully submitted that the addition of this phrase to claim 1 now provides adequate antecedent basis for the use of the term "salts" in dependent claims 5 and 6. Support for these additions in the claims is found in the application as filed in line 25 of page 3 and lines 16-21 on page 6, and thus do not constitute improper insertions of new matter. These amendments were made only to correct inadvertent clerical matters and not for any substantial reason related to patentability. The Applicant regrets any confusion the inadvertent clerical errors may have caused.

Additionally, the Examiner's attention is respectfully directed to the amendments to claims 1 and 9 herein where the phrase "polymer gelled" has been deleted from in front of the term "aqueous fluids" and the phrase "comprising a polymer gel, the method" has been added behind this term in each claim. It is thus respectfully submitted that this change provides *ipso verba* basis for the term "the gel". These amendments were made only to correct inadvertent clerical matters and not for any substantial reason related to patentability. The Applicant regrets any confusion the inadvertent clerical errors may have caused.

The Examiner's attention is also directed to the change in claim 9 where the inadvertently omitted word "act" has been added to the third line thereof after the word "to" and before the word "directly". Support for this addition is found in the application as filed in line 2 of page 4 and elsewhere and thus does not constitute an improper insertion of new matter. This amendment was made only to correct an inadvertent clerical omission and not for any substantial reason related to patentability. The Applicant regrets any confusion the inadvertent clerical error may have caused.

With respect to claims 14 and 20, the Applicant respectfully submits that it is presently clear that the at least one polymer forms *an* aqueous gel giving the aqueous fluid this particular form, and then at some later time the aminocarboxylic acid present in

the fluid directly breaks down that gel, as demonstrated by the language "*the gel*". Antecedent basis is provided, and then the reference is made. Directly breaking down *the gel* is not possible until *an* aqueous gel is first formed. Thus, it is respectfully submitted that the language of these claims as filed is clear. However, to avoid confusion, and at the risk of redundancy, the word "subsequently" has been added after the phrase "in an amount effective to" and before the phrase "directly break down the gel" to make the sequence very clear. Support for this clarification is found in the application as filed in the Detailed Description of the Invention, pages 3-12, particularly the Examples. The Applicant is aware that the Examiner is experienced in the fracturing fluid arts and realizes that it is common in the art for a fracturing fluid to simultaneously contain both the agents that form the gel or increase the viscosity along with the agents that subsequently break the gel or reduce the viscosity. These amendments were made only to clarify and/or emphasize a feature already recited in the claims as filed, and not for any substantial reason related to patentability.

Finally, the Examiner contends that Applicant does not define the term cross-linking and/or cross linker in the claims, yet mentions that the specification indicates borate cross-linked guar gum. The Examiner is correct that in one non-limiting embodiment of the invention, the polymer gel may be borate cross-linked guar gum. It should be noted that it is not necessary that a crosslinker be present. The Examiner's attention is respectfully directed to claims 3, 10, 15 and 20, as well page 4, lines 16-18, which states, "These polysaccharides are capable of gelling in the presence of a crosslinking agent to form a gelled base fluid, *although as noted it is not necessary that the polymer be cross-linked.*" [Emphasis added.] Further, although borate crosslinking agents are preferred in one non-limiting embodiment, other crosslinking agents may also be used, or avoided, depending upon the embodiment; please see page 5, lines 3-15:

"In addition to the hydratable polymer, the fracturing fluids of the invention include a borate crosslinking agent. The crosslinking agent can be any of the conventionally used borate crosslinking agents that are known to those skilled in the art. This includes any of the boron salts or boric acid as borate crosslinking agents. ... However, other crosslinking agents that can be used with this embodiment besides borate, may include, but are not limited to, titanate, zirconate, and other metallic and semi-metallic high pH crosslinkers."

If this explanation is unclear, the Examiner is invited to be more explicit about his concern.

Reconsideration is respectfully requested.

35 U.S.C. §102 Rejection Based on Lai, et al.

The Examiner has rejected claims 1-2, 5-7, 9, 12, 14, 17, and 18 under 35 U.S.C. 102(e), as being allegedly anticipated by U.S. Pat. No. 6,265,355 to Lai, et al.

The Examiner finds that Lai, et al. discloses the addition of aminocarboxylic acid salts to cross-linked polyacrylamide gels for the purpose of breaking said gels.

The Applicant must respectfully traverse.

It is respectfully submitted that a patent claim is anticipated, and therefore invalid, only when a single prior art reference discloses each and every limitation of the claim. *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047, 34 U.S.P.Q.2d 1565 (Fed. Cir.), cert. denied, 116 S.Ct. 516 (1995). As will be explained, Lai, et al. does not disclose each and every limitation of the rejected claims.

The invention herein concerns the discovery that aqueous fluids comprising a polymer gel can have that gel broken using one aminocarboxylic (or a salt thereof) because the single acid directly breaks down the gel, rather than attacking, removing or otherwise affecting the crosslinker. The rejected claims are directed to this invention.

It is further respectfully submitted that the Examiner did not go far enough in outlining the minimum invention of Lai, et al. This patent concerns a composition containing a chelating agent and a carboxylic acid, and a method for breaking a gel formed by a crosslinkable polymer and a crosslinking agent. The Examiner's attention is respectfully directed to the Abstract, Summary of the Invention (column 2, lines 30-52), and claim 1, and elsewhere in Lai, et al. The reference does not teach or suggest *an* aminocarboxylic acid directly breaking down the gel (whether or not crosslinked) as claimed. Because the single prior art reference does not disclose each and every limitation of the claim, the rejection must fall.

A further review of Lai, et al. finds that the reference teaches away from the subject invention. Lai, et al. repeatedly and consistently teaches that the mechanism of their invention is to break the gel by reacting with the crosslinking agent. The Examiner's attention is respectfully directed to column 2, lines 7-16:

Previously, gels have been removed from subterranean formations by the use of strong oxidizing materials which are less effective than other agents which may be used to break the gel *by chelating or otherwise reacting with the crosslinking agent*. Various materials have been proposed for use as chelating agents, but all are attended by certain drawbacks such as, for instance in the use of EDTA (ethylenediaminetetraacetic acid), it has been found that EDTA is effective with the substantially solid ringed gels but works poorly with the viscous gels typically formed by the higher molecular weight polymers. [Emphasis added.]

The Examiner's attention is further and particularly directed to column 4, lines 25-28:

The broken gel is returned to its fluid state prior to crosslinking. The gel is then readily removed from the subterranean formation by simply producing fluids from the formation. [Emphasis added.]

Because the broken gel is returned to its fluid state *prior to crosslinking*, it can only be concluded that the Lai, et al. mechanism operates only by affecting the crosslinker and not the polymer to directly break down the gel. It is thus respectfully submitted that the mechanism by which the Lai, et al. method operates is completely different from that claimed in the instant invention, and is further evidence that the single prior art reference has not disclosed, and cannot disclose, each and every limitation of the claim.

It is respectfully submitted that for all of these reasons, the instant rejection is overcome and rendered moot. Reconsideration is respectfully requested.

35 U.S.C. §102 Rejection Based on Hall, et al.

The Examiner has rejected claims 1-23 under 35 U.S.C. 102(b), as being allegedly anticipated by U.S. Pat. No. 5,054,552 to Hall, et al.

The Examiner finds that Hall, et al. discloses the addition of oxidizers, ferrous ammonium sulfate and EDTA to a non-crosslinked xanthan gum gel as a breaker, referring to column 3, lines 8-27, the Examples and Tables 1 and 2. The Examiner finds that

the concentration of the EDTA is within the claimed range based on a 1% use of the catalyst which equates to about 1.1 kg/m³. The Examiner further finds that the iron salt is added as a catalyst and not as a crosslinking agent. The Examiner notes that although some of Applicant's claims exclude the use of a crosslinker, the Applicant does not specifically define the scope of the crosslinkers to be excluded. The iron salts of the reference are added to the xanthan in the gel form for the purpose of breaking said gel. Finally, the Examiner finds that Applicant's claims do not exclude the further ingredients in the Hall, et al. reference by the use of the transition language "comprising".

The Applicant must respectfully traverse.

It is again respectfully submitted that a patent claim is anticipated, and therefore invalid, only when a single prior art reference discloses each and every limitation of the claim. *Glaxo Inc. v. Novopharm Ltd.*, *id.* As will be established, Hall, et al. also does not disclose each and every limitation of the rejected claims.

A closer look at Hall, et al. finds that "This invention comprises a breaker system for xanthan gum thickeners wherein a combination of at least two oxidizers, an organic acid, and at least two catalysts is used as a breaker for high viscosity aqueous fluids containing xanthan gum." This excerpt is from the Summary, column 1, line 67 to column 2, line 3, but please also see the Abstract, claim 1 and elsewhere. In particular, the Examiner's attention is respectfully directed to column 3, lines 8-20:

Other breaker systems previously used on high viscosity aqueous fluids containing xanthan gums were *not effective* in breaking the gel, both in terms of break time and final viscosity. Furthermore, even when the aqueous fluid was broken, a high level of residue from the xanthan gum remained in the formation. However, the combination of the components in the inventive breaker system, namely *at least two oxidizers, an organic acid and at least two catalysts*, effects a fast, efficient and clean breaking of thickened fluids containing xanthan gum. *As shown in Example 1, all of the components of the breaker system must be present for the breaker system to work effectively.* [Emphasis added.]

The last sentence quoted teaches that all of five components are necessary to effectively break xanthan gum gels. This stated necessity is quite contrary to the Applicant's discovery, which is that an aminocarboxylic acid can effectively and directly break down a gel,

without the necessity for at least two oxidizers, an organic acid, and at least two catalysts.

Hall, et al. further essentially require that one of the at least two catalysts be a soluble iron salt and the other a tertiary amine. The Examiner's attention is further respectfully directed to column 3, lines 21-27:

In a preferred embodiment of the invention, the oxidizers are sodium percarbonate and ammonium persulfate, the organic acid is citric acid, *and the catalysts are a soluble iron salt and a tertiary amine.* The preferred soluble iron salt is ferrous ammonium sulfate, and the preferred tertiary amine is the ethylene diamine tetracetic acid (EDTA). [Emphasis added.]

Additional clear evidence that both ferrous ammonium sulfate and EDTA are required in the Hall, et al. method is found in footnote "a" to Table 1, which reads: "A prior study of catalysts, using ferrous ammonium sulfate and ethylene diamine tetracetic acid, showed that *both catalysts were require for an effective break.*" These portions of Hall, et al. demonstrate that the tertiary amine must operate as a catalyst and must act together with four other components, one of which is a ferrous ammonium sulfate catalyst. The Hall, et al. breaker system is quite complex and is nothing like that of the claimed invention that only requires an aminocarboxylic acid, and which acid acts directly to break down the gel.

Indeed, in Hall, et al.'s method, the tertiary amine is exactly what Hall, et al. says it is – a catalyst for the activity of the two oxidizers. And as a catalyst, Hall, et al. teaches that it is required to be used with a co-catalyst, namely ferrous ammonium sulfate, and that these catalysts must be used with at least two oxidizers and an organic acid to be effective. By contrast, the Applicant has surprisingly discovered that aminocarboxylic acids (or salts thereof) can act directly to break down a polymer gel, without the necessity of any other components, and this is what is claimed. Hall, et al. cannot teach or suggest this invention, because they explicitly teach that all five components are necessary and required for their breaker system.

The Examiner's attention is respectfully directed to page 4, lines 4-6 of the instant application, which recite: "The gel breaking method of this invention is expected to be an *attractive alternative* to using enzyme technology or catalyzed oxidizer technol-

ogy to break gels within this temperature range.” (Emphasis added.) It is respectfully submitted that both Lai, et al. and Hall, et al. are both instances of “catalyzed oxidizer technology” that is in stark contrast to the claimed invention. Please also see page 6 where after listing a number of aminocarboxylic acids and their salts, lines 21-22 summarize: “All of these aminocarboxylic acids were discovered to break polymer gels by themselves.” While other breakers may be present, the invention has discovered that aminocarboxylic acids act directly on the gels to break them, and that oxidizers, organic acids and “at least two catalysts” are not necessary.

Because the Examiner has not shown that the single reference has disclosed each and every limitation of the claims, *i.e.* that the invention acts by “an effective amount of at least one aminocarboxylic acid or a salt thereof to directly break down the gel”, the subject rejection under 35 U.S.C. §102 cannot stand. Reconsideration is respectfully requested.

35 U.S.C. §103 Rejection Based on Hall, et al.

The Examiner has rejected claims 1-23 under 35 U.S.C. 103(a), as being allegedly unpatentable over Hall, et al. for reasons of obviousness. The Examiner notes that Hall, et al. discloses xanthan gels as set forth in the above rejection. The Examiner incorporated said characterization herein by reference.

The Examiner further states that to the extent the concentrations for the EDTA differ from those exemplified in the Hall, et al. reference or the possible characterization of the ferrous salt as a crosslinker, Hall, et al. discloses (column 3, lines 59 *et seq.*) concentration ranges for the breaker agents.

The Examiner concludes that it allegedly would have been obvious for one having ordinary skill in the art at the time of Applicant's invention to vary the concentrations within the ranges taught in the Hall, et al. reference for the advantage of improved breaking of the xanthan gels.

Furthermore, the Examiner finds that Hall, et al. is silent regarding any crosslinking, there is no suggestion that the ferrous ions could crosslink the xanthan as employed in the Hall, et al. reference, and the ferrous salt is characterized by Hall, et al. as a catalyst for the oxidation. One having ordinary skill in the art at the time of the invention

would not have expected the ferrous salt and/or ion to function as a cross-linker, said cross-linker being excluded by the instant claims.

The Applicant must respectfully traverse.

The Applicant is confused by the Examiner's discussion about ferrous ions in the Hall, et al. method as possibly being crosslinkers. As the Examiner notes, Hall, et al. explicitly characterizes ferrous ammonium sulfate as a catalyst necessarily present with the tertiary amine catalyst. Hall, et al. does not speak of crosslinkers or a crosslinked xanthan gel. Neither does Hall, et al. teach, hint or suggest that ferrous ammonium sulfate can directly break down a polymer gel any more than it teaches that tertiary amines can directly break down a polymer gel, without the presence of the other four components.

It is again respectfully submitted that Hall, et al. consistently and repeatedly teaches that in their breaker system, it is necessary to have at least five components:

1. a first *oxidizer*,
2. a second *oxidizer*,
3. an *organic acid*,
4. a first *catalyst*: a soluble iron salt; *ferrous ammonium sulfate* being required as per footnote *a* to Table 1, and
5. a second *catalyst*: a tertiary amine; *ethylene diamine tetracetic acid* being required as per footnote *a* to Table 1.

The soluble iron salt and tertiary amine are not the breakers; they are the catalysts for the oxidative breaker system, as Hall, et al. explicitly notes.¹

Indeed, Hall, et al. teach away from the claimed invention since they teach not only that "all of the components of the breaker system must be present for the breaker system to work effectively" (column 3, lines 18-20) as quoted above, but that "both catalysts were require for an effective break" (footnote *a* to Table 1 at column 3, lines 47-48, also quoted above). The Applicant has surprisingly discovered that all of these

¹ For the Examiner's information, the organic acid required by Hall, et al. is not a breaker, but rather is a breaker aid. It aids by controlling the breaking rate (slows the rate down) of the iron- and tertiary amine-catalyzed persulfate and percarbonate oxidizer reaction. Note column 2, lines 17-22, which speak of

other components and catalysts are not necessary, and that an aminocarboxylic acid (or salt thereof) can act directly to break down the gel.

Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 230 U.S.P.Q. 81 (Fed. Cir. 1986), *on rehearing*, 231 U.S.P.Q. 160 (Fed. Cir. 1986) instructs that the inventor achieving the claimed invention by doing what those in the art suggested should not be done is a fact strongly probative of nonobviousness. An obviousness rejection cannot stand if the references teach away from the invention, *In re Hedges* 228 U.S.P.Q. 685, 687, 837 F.2d 473 (Fed. Cir. 1986). A reference which leads one of ordinary skill in the art away from the claimed invention cannot render it unpatentably obvious. *Dow Chemical Co. v. American Cyanamid Co.* 816 F.2d 617 2 U.S.P.Q.2d 1350 (Fed. Cir. 1987); *In re Grasselli, et al.*, 713 F.2d 731, 218 U.S.P.Q. 269 (Fed. Cir. 1983); *In re Dow Chemical Co.* 837 F.2d 469, 5 U.S.P.Q.2d 1529 (Fed. Cir. 1988).

Tertiary amines have been used in connection with persulfates in breaker systems before. The Applicant would respectfully direct the Examiner's attention to U.S. Pat. No. 4,250,044 to Hinkel (copy enclosed). This patent discloses a tertiary amine/persulfate breaker system that effects complete breaks of polysaccharide based water-gels or fluids in the ambient temperature range (Abstract). The Examiner's attention is particularly directed to column 4, lines 57-68 therein:

The breaker comprises an effective amount of water or partially water-soluble compound(s) containing at least one functional tertiary amine group. The amine is utilized with an effective amount of ammonium persulfate, the most preferred combination, or an alkali metal persulfate. *Neither the amine or persulfate is effective, if present alone, in the temperature range embraced by the invention, with the persulfate alone showing what is characterized as essentially no practical activity in the ambient temperature range, and inefficient activity at the very upper part of the range, i.e., 125°F. (about 50°C.).* [Emphasis added.]

This patent teaches away from the use of a tertiary amine, particularly triethanolamine, apart from a persulfate (particularly ammonium persulfates and alkali metal persulfates) in breaker systems. This patent teaches against the claimed invention of using at least one carboxylic acid (or salt thereof) to directly break down the gel.

"controlling the rate of viscosity reduction" and how more than 25 pptg of citric acid in Samples 2 and 3 of Table 2 slows the rate down.

The Applicant would also respectfully direct the Examiner's attention to U.S. Pat. No. 4,959,526 to Cawiezel (copy also enclosed) that discloses a tertiary amine hydrochloride/persulfate breaker system which effects complete breaks of polysaccharide-based gels or fluids in the ambient temperature range without interfering with the delayed crosslink mechanism in the fracturing fluid. Please see the Abstract, which continues: "The use of tertiary amine hydrochloride avoids an immediate shift in pH which would counteract means employed to effect a delayed crosslink mechanism." The Examiner's attention is further directed to column 3, lines 23-33:

Triethanolamine and other amines with pK_b from about 2 to 9 are excellent breaker aids at low temperature *but produce a large increase in pH which shifts the pH of the fluid to a basic value prematurely activating the borate crosslinking mechanism thereby forming a viscous gel immediately. No crosslinked time delay is possible with these systems. It has been found that triethanolamine hydrochloride is an excellent breaker aid at low temperature but avoids the shift in pH to a basic value and thus does not interfere with a delayed crosslinking mechanism.* [Emphasis added.]

In other words, triethanolamine *hydrochloride* is an excellent breaker aid at these low temperatures because it doesn't shift the pH like triethanolamine does which thus interferes with a delayed crosslinking mechanism. Triethanolamine *hydrochloride* thus preserves the *delayed* crosslinking mechanism, rather than interferes and speeds up crosslinking. The Cawiezel patent thus further teaches away from the invention as claimed, *i.e.* that an aminocarboxylic acid (or salt thereof) can act directly to break down the gel.

The Examiner's attention is respectfully directed to the Examples in the application as filed, particularly Examples 6 and 7 where Na_4EDTA effectively broke a non-crosslinked linear guar. No persulfate was present, no oxidizer (much less two) was present, no catalyst was present, and no organic acid was present. The Examiner's attention is especially directed to page 11, lines 23-26 and page 12, lines 7-10 which state: "Because this polymer gel was not crosslinked, this Example [also] *demonstrates that the aminocarboxylic acid acts directly and predominantly on the polymer itself, rather than only or substantially on any crosslinker that may be present.*" (Emphasis added.)

It is respectfully submitted that one having ordinary skill in the art at the time of the invention would not know that an aminocarboxylic acid (or salt thereof) could act

directly to break down the gel in the face of the art discussed above teaching away from the invention. It is thus respectfully submitted that a *prima facie* obviousness rejection has not been established with respect to any of the rejected claims over the reference. Reconsideration is respectfully requested.

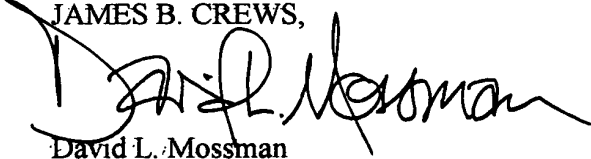
Supplemental Information Disclosure Statement under 37 CFR §1.56

It is respectfully submitted that the art listed on the attached PTO/SB/08A be considered in the examination of the subject application and made of record herein. A copy of the art is enclosed herewith.

The art is in English and thus an explanation of its relevance is not required, nevertheless, the relevance of these documents is set out in the discussion of the rejection immediately above.

It is respectfully submitted that the arguments and amendments presented above overcome all of the instant rejections. Reconsideration of the claims is respectfully requested. The Examiner is respectfully reminded of his duty to indicate allowable subject matter. The Examiner is invited to call the Applicant's attorney at the number below for any reason, especially any reason that may help advance the prosecution.

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Version With Markings to Show Changes Made in Specification and Claims

Please amend paragraph [0019] at page 4, lines 7 and 24, as follows:

--[0019] In order to practice the method of the invention, an aqueous fracturing fluid is first prepared by blending a hydratable polymer into an aqueous fluid. The aqueous fluid could be, for example, water, brine, aqueous based foams or water-alcohol mixtures. Any suitable mixing apparatus may be used for this procedure. In the case of batch mixing, the hydratable polymer and the aqueous fluid are blended for a period of time sufficient to form a hydrated solution. The hydratable polymer that is useful in the present invention can be, but [are] is not necessarily limited to, any of the hydratable polysaccharides having galactose or mannose monosaccharide components and are familiar to those in the well service industry. These polysaccharides are capable of gelling in the presence of a crosslinking agent to form a gelled base fluid, although as noted it is not necessary that the polymer be crosslinked. For instance, suitable hydratable polysaccharides are the galactomannan gums, guar and derivatized guar, as non-limiting examples. Specific examples are guar gum and guar gum derivatives. The preferred gelling agents are guar gum, hydroxypropyl guar and carboxymethyl hydroxypropyl guar. The most preferred hydratable polymers for the present invention are guar gum and carboxymethyl hydroxypropyl guar and hydroxypropyl guar, in one non-limiting case.--

Please amend claims 1, 9, 14 and 20 as follows:

--1. (Amended) A method for breaking the viscosity of [polymer gelled] aqueous fluids comprising a polymer gel, the method comprising adding an effective amount of at least one aminocarboxylic acid or a salt thereof to directly break down the gel.--

--9. (Amended) A method for breaking the viscosity of [polymer gelled] aqueous fluids comprising a polymer gel, the method comprising adding an effective amount of at least one aminocarboxylic acid to act directly on the polymer and not any crosslinking ion, if present, to break down the gel, where the aminocarboxylic acid is selected from the group consisting of ethylenediaminetetraacetic acid (EDTA), propylenediaminetetraacetic acid (PDTA), hydroxyethylenediaminetetraacetic acid (HEDTA), nitrilotriacetic

acid (NTA), ethylenediaminetriacetic acid (HEDTA), ethylenediaminediacetic acid (H₂EDDA), dihydrate ethylenediaminediacetic acid (2H₂O EDTA), salts of these acids, and mixtures thereof, and where the method is conducted at a temperature between about 120°F (49°C) and about 280° F (138°C).--

--14. (Amended) An aqueous fluid comprising

water;

at least one polymer forming an aqueous gel; and

at least one aminocarboxylic acid or a salt thereof in an amount effective to subsequently directly break down the gel.--

--20. (Amended) An aqueous fluid comprising

water;

at least one polymer forming an aqueous gel;

at least one aminocarboxylic acid or a salt thereof in an amount effective to subsequently directly break down the gel; and

the absence of a crosslinker,

where the aminocarboxylic acid is selected from the group consisting of ethylenediaminetetraacetic acid (EDTA), propylenediaminetetraacetic acid (PDTA), hydroxyethylenediaminetetraacetic acid (HEDTA), nitrilotriacetic acid (NTA), ethylenediaminetriacetic acid (HEDTA), ethylenediaminediacetic acid (H₂EDDA), dihydrate ethylenediaminediacetic acid (2H₂O EDTA), salts of these acids, and mixtures thereof.--